REMEDIAL DESIGN
SSTOU SUBAREA 3
REACHES M -O

TASK ORDER NO. 44

This Task Order is issued pursuant to DEQ Contract No. 407038 between Pioneer Technical Services, Inc. (Contractor) and the Montana Department of Environmental Quality (DEQ). The purpose of this Task Order is to complete Draft Remedial Design (RD) for the Remedial Actions (RAs) in Reaches M, N and O of Subarea 3 of the Streamside Tailings Operable Unit (SST OU), as well as to complete design of the upgrade of the existing haul road through Reach L.

TASK DESCRIPTION

The purpose of the RAs is to mitigate impacts to the environment and potential impacts to human health associated with mine wastes at this site in compliance with the SST OU Record of Decision (ROD). Specifically, the project is to complete the Draft RD for the RAs in Reaches M, N and O of Subarea 3 ("Reaches" or "Reach" when referring to a specific Reach) of the SST OU. A map of the Reaches in attached hereto as Attachment 1. The tasks to be performed in Reaches M, N and O under this Task Order are as follows.

PROJECT MANAGEMENT:

- Contractor shall track budgets, prepare and submit status reports, and direct and coordinate staff as necessary to complete the Tasks described in this Task Order.

PROJECT PLANNING:

- Contractor shall prepare bid packages, assign tasks, and identify project elements to complete the RAs described in this Task Order.

MEETINGS AND CONFERENCES:

Contractor shall:

- Prepare for and attend bi-weekly progress RA meetings with DEQ
- Meet with and coordinate with State of Montana Natural Resource Damages Program personnel as requested by DEQ, to identify and incorporate restoration design elements into RDs for Reaches.
- Prepare materials for and participate in meetings with all stakeholders with interest in the Reaches, including Atlantic Richfield Company, Burlington Northern Santa Fe Railroad, Patriot/Rarus Railroad, Butte-Silver Bow County, Anaconda Deer Lodge County, The United States Environmental Protection Agency, and others as identified to coordinate proposed SSTOU Remedial Actions with other activities and address stakeholders concerns.

CHARACTERIZATION:

Contractor shall:

- Complete groundwater investigations to identify areas of saturated tailings within each of the Reaches, determine if additional data is needed for a complete any or all groundwater investigations, collect additional data if needed to complete any investigation, establish a general groundwater surface for each of the Reaches, and determine if and where dewatering is necessary for each of the Reaches.
- Refine estimates of the volume of vegetative borrow and general backfill needed for each of the Reaches. Estimate the volume of vegetative borrow that will be available from existing sources after the completion of the remediation of Reaches K-L of Subarea 3 and identify any additional available general backfill borrow locations within Subarea 3.
- Visually survey the Reaches to quantify the debris present, including tires, railroad ties, telegraph poles, wire, and any other debris.
- Develop and implement a geotechnical testing plan for haul road locations proposed by DEQ and identify sources of haul road construction materials for these proposed haul road.
- Inspect the abandoned railroad grade located within the Reaches, which will serve as the existing haul road, identify any necessary repairs or upgrades to the roadway and bridges within the Reaches, and design necessary repairs and upgrades.
- Complete a visual inspection of each Reach to identify potential hazards, previously undiscovered historic sites, waste materials, debris, obstacles, and any other feature that may affect the RD for that Reach.
- Identify and locate historic sites and features within each Reach.
- Locate all surface and subsurface utilities at all proposed excavation areas, stream reconstruction areas, and haul road locations.

DATA SUMMARY REVIEW AND EVALUATIONS:

Contractors shall:

- Compile characterization data collected and incorporate it in DEQ base maps and DEQ's database for SSTOU.

REPORT PREPARATION:

Contractor shall:

- Prepare a data summary report describing and summarizing all characterization data collected pursuant to this Task Order.

DESIGN TASKS:

Contractor shall:

- Prepare a Tailings/Impacted soils excavation plan for each Reach.
- Design stream diversion and groundwater dewatering plans for each Reach.
- Prepare a model for proposed floodplain topography and channel alignment for each Reach using HEC-RAS as necessary for design.
- Finalize stream channel design; develop final planform and cross-section design for each Reach, incorporating the Stream Conceptual Design Report and the Confluence Review reports (DDR Appendix C) previously prepared for DEQ and made available to Contractor.
- Finalize haul road layouts, prepare design for temporary railroad crossings, and prepare design for new haul roads within the Reaches.
- Complete design of upgrade of the existing haul road through the end of Reach L.
- Design the excavation, isolation, or treatment of tailings/impacted soil for railroad embankments within each Reach.
- Identify and design railroad remediation for those areas that require only vegetative or soil cover.
- Identify and evaluate access to each Reach for conduct of RAs and design tailings/impacted soil excavation and hauling plans for hauling tailings/impacted soil materials to railroad load-out facilities within each Reach as necessary for RAs within the Reach.
- Identify and evaluate access for each Reach necessary to design an RA for railroad contamination for all Reaches.
- Prepare design for removal of the sediment pond in Reach O.
- Prepare plans for access to borrow areas and movement of borrow materials for each RA within each Reach

BID PACKAGE:

Contractor shall:

- Prepare a draft construction bid package for DEQ for construction of Remedial Actions for the Reaches including tailings/impacted soils excavation plans, haul road design; stream diversion and dewatering plans; groundwater dewatering plans; tailings removal; fencing; erosion control BMPs; traffic control; physical hazard mitigation; borrow haul and stockpile plan; stream channel design; floodplain recontouring plan (if needed); and site cleanup. The documents shall use DEQ's standard bid package format.

- Prepare the engineer's construction cost estimate in conjunction with the submittal of the draft construction bid package.

- Submit the draft construction bid packages to DEQ for written comment

- Incorporate DEQ comments on the draft construction bid package and engineer's cost estimate and deliver the final construction bid package and cost estimate to DEQ.

TECHNICAL SUPPORT DURING BID SOLICITATION PROCESS TASKS:

Contractor shall:

- Participate in and take notes at the Pre-Bid Conference and Pre-Award Conference. Contractor shall prepare an agenda for and take notes of issues that arise during these meetings. Contractor shall provide technical support as directed by DEQ during the bid solicitation process, including but not limited to preparing responses to questions, drafting any Addenda, and completing revisions to the bid package, including the Drawings, Special Provisions, and Technical Specifications as directed by DEQ

DELIVERABLES

- One (1) hard copy of the draft construction bid package and the engineer's construction cost estimate.
- Two (2) hard copies and two (2) electronic copies of the final construction bid package and engineer's cost estimate.
- Monthly status reports.

SCHEDULE

The preliminary draft drawings and special provisions of the draft bid package will be submitted to DEQ By November 30, 2010. All tasks will be completed by February 28, 2011.

COMPENSATION

Compensation will be paid in accordance with DEQ Contract No. 407038. A DEQ form, Cost or Price Summary, detailing the cost of this work is attached. The fixed fee was negotiated between DEQ and Contractor. The cost of this Task Order is $153,911.26, plus a fixed fee of $14,373.27 making a total cost of $168,284.53. The total cost ceiling may not be exceeded without written authorization signed by DEQ and Contractor. Compensation will be paid to Contractor according to invoices submitted monthly to DEQ for costs actually incurred.

LIAISON

The DEQ Project Officer for the SSTOU Subarea 3, Reaches M, N, and O Remedial Design, is Joel Chavez (406/841-5031). Contractor's Project Manager is Tim Ranf (406/457-8252).

AUTHORIZATION

This Task Order shall be effective only after signature of both parties and such signatures shall constitute authorization for Contractor to proceed with the tasks described under the TASK

DESCRIPTION section of this Task Order No. 44. The Effective Date shall be the latter of the two dates of signature. Approval by the appropriate DEQ representative will constitute acceptance of this work effort.

IN WITNESS WHEREOF, Contractor and DEQ have executed this Task Order No. 44 on the dates set out below.

STATE OF MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

04/27/10
DATE

BY: Vicki J Woodrow
VICKI WOODROW
Contracts Officer
Financial Services
Metcalf Building, Room 006
1520 E. Sixth Avenue, P.O. Box 200901
Helena, MT 59620-0901

Approved for legal content by:

Thomas E. Root
Thomas E. Root
DEQ Counsel

4/26/10
Date

PIONEER TECHNICAL SERVICES, INC.

4/30/10
DATE

BY: David S Tuesday
DAVID S. TUESDAY
Vice President
63 ½ West Broadway
P.O. Box 3445
Butte, MT 59701

FEDERAL ID NO. 81-0474175

DEQ COST OR PRICE SUMMARY

Form Approved: 7-22-92

PART I - GENERAL

1. PROJECT **Reaches M-O Remedial Design, SST OU Subarea 3**	2. DEQ CONTRACT NUMBER: **407038-TOxx-44**
3. NAME OF CONTRACTOR OR SUBCONTRACTOR PIONEER TECHNICAL SERVICES, INC.	4. PROPOSAL DATE: **4/15/2010**
5. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR (Include ZIP Code) **Pioneer Technical Services, Inc.** **P.O. Box 3445** **Butte, Montana 59702** TELEPHONE NUMBER (Include Area Code) **(406) 782-5177**	6. TYPE OF SERVICE TO BE FURNISHED **Reaches M-O Remedial Design, SST OU Subarea 3**

PART II - COST SUMMARY

7. DIRECT LABOR (Specify labor categories)	ESTIMATED HOURS	HOURLY RATE	ESTIMATED COST	TOTALS
Brad Archibald	6	$47.50	$285.00	
Dave Tuesday	4	$47.50	$190.00	
Joel Gerhart	146	$42.75	$6,241.50	
Tim Ranf	212	$42.75	$9,063.00	
Todd Lorenzen	42	$35.53	$1,492.26	
Colt Wise	22	$36.30	$798.60	
Pierre Lemieux	362	$33.32	$12,061.84	
Diane Lorenzen	108	$33.10	$3,574.80	
Mike Borduin	36	$28.60	$1,029.60	
Dave Peitz	124	$24.65	$3,056.60	
Tony Wesche	328	$26.70	$8,757.60	
Patrick Sheehy	384	$21.51	$8,259.84	
Jared Lay	28	$26.00	$728.00	
Josh Bush	468	$16.29	$7,623.72	
Kelli Maxwell	22	$13.65	$300.30	
Connie Logan	8	$24.56	$196.48	
DIRECT LABOR TOTAL:	2,300			$63,659.14

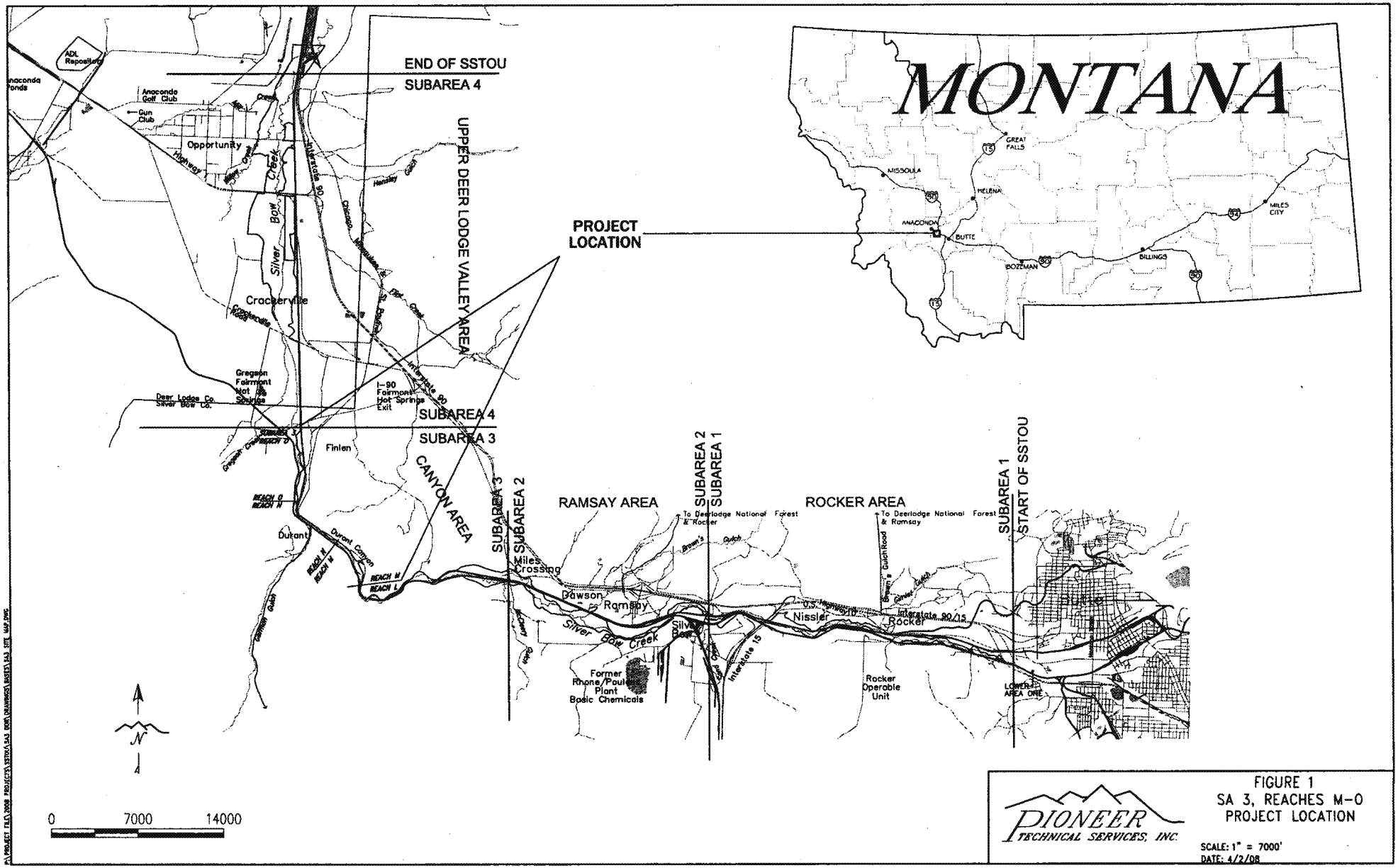
8. INDIRECT COSTS (Specify indirect cost pools)		x BASE =	ESTIMATED COST	
Salary	56.30%	63,659.14	$35,840.10	
General (G&A)	72.75%	63,659.14	$46,312.02	
INDIRECT COSTS TOTAL:				$82,152.12

9. OTHER DIRECT COSTS				
a. TRAVEL	UNITS	COST PER UNIT	ESTIMATED COST	
(1) Transportation 4x4 Pickup	2,040	$0.500	$1,020.00	
(2) Meals		$23.00	$0.00	
(3) Lodging		$36.40	$0.00	
			$0.00	
TRAVEL SUBTOTAL:			$1,020.00	
b. EQUIPMENT, MATERIALS, SUPPLIES (Specify categories)	UNITS	COST PER UNIT	ESTIMATED COST	
Report/Plan Reproduction, Lump Sum	1	$1,200.00	$1,200.00	
EQUIPMENT, MATERIALS, SUPPLIES SUBTOTAL:			$1,200.00	
c. SUBCONTRACTS (Specify Categories)	UNITS	COST PER UNIT	ESTIMATED COST	
Excavator and Operator	20	$110.00	$2,200.00	
Excavator Mob/demob	4	$95.00	$380.00	
SUBCONTRACT SUBTOTAL:			$2,580.00	
d. OTHER (Specify Categories)	UNITS	COST PER UNIT	ESTIMATED COST	
Moisture Content	8	$15.00	$120.00	
Soil Gradation	8	$110.00	$880.00	
Hydrometer	4	$85.00	$340.00	
Atterberg Limits	8	$90.00	$720.00	
Corrosion	8	$80.00	$640.00	
Proctor	4	$150.00	$600.00	
OTHER SUBTOTAL			$3,300.00	
OTHER DIRECT COSTS TOTAL:				$8,100.00

10. TOTAL ESTIMATED COST	$153,911.26
11. PROFIT	$14,373.27
12. TOTAL PRICE	$168,284.53

PROFIT/FEE CALCULATION	Cost	Weight	Weighted Fee	Totals
Engineering - Direct	$63,659.14	12%	$7,639.10	$71,298.24
Engineering Overhead	$82,152.12	8%	$6,572.17	$88,724.29
Other Direct	$8,100.00	2%	$162.00	$8,262.00
TOTALS & WEIGHTED AVERAGE PROFIT	$153,911.26	9.34%	$14,373.27	$168,284.53

Profit/Fee Objective		1. Contractor	2. RFP or Contract No.						
		Pioneer Technical Services, Inc.	**407038-TOxx**						
CONTRACTOR INPUT TO TOTAL PERFORMANCE									
Cost Category		Government's Co Objective (a)	Weight Range (b)	Assigned Weight-L (c)	Weighted Profit/Fee ((a)x(c)) (d)	Assigned Weight-Hi (e)	Weighted Profit/Fee ((a)x(e)) (f)	Assigned Weight-Av (g)	Weighted Profit/Fee ((a)x(g)) (h)
Direct Materials:	Purchases	$0.00	1%-4%	1%	$0.00	4%	$0.00	2.50%	$0.00
	Subcontracts	$0.00	1%-5%	1%	$0.00	5%	$0.00	3.00%	$0.00
Equipment		$0.00	1%-2%	1%	$0.00	2%	$0.00	1.50%	$0.00
Engineering:	Direct Labor	**$63,659.14**	8%-15%	8%	$5,092.73	15%	$9,548.87	12.00%	**$7,639.10**
	Overhead	**$82,152.12**	6%-9%	6%	$4,929.13	9%	$7,393.69	8.00%	**$6,572.17**
Manufacturing:	Direct Labor	$0.00	5%-9%	5%	$0.00	9%	$0.00	7.00%	$0.00
	Overhead	$0.00	4%-7%	4%	$0.00	7%	$0.00	5.50%	$0.00
Consultants		$0.00	2%-5%	2%	$0.00	5%	$0.00	3.50%	$0.00
Other Direct costs:		**$8,100.00**	1%-3%	1%	$81.00	3%	$243.00	2.00%	**$162.00**
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
General & Administrative		$0.00	5%-8%	5%	$0.00	8%	$0.00	6.00%	$0.00
TOTALS		$153,911.26			$10,102.86		$17,185.56		$14,373.27
AVERAGE PROFIT					6.56%		11.17%		9.34%



PIONEER TECHNICAL SERVICES, INC.

FIGURE 1
SA 3, REACHES M-O
PROJECT LOCATION

SCALE: 1" = 7000'
DATE: 4/2/08

MODIFICATION A TO TASK ORDER NO. 44

DEQ ORIGINAL

This Task Order is issued pursuant to DEQ Contract No. 407038 between Pioneer Technical Services, Inc. (Contractor) and the Montana Department of Environmental Quality (DEQ). The purpose of this Task Order is to complete Draft Remedial Design (RD) for the Remedial Actions (RAs) in Reaches M, N and O of Subarea 3 of the Streamside Tailings Operable Unit (SST OU), as well as to complete design of the upgrade of the existing haul road through Reach L. This Modification A extends the period of performance to allow additional time needed to complete the remaining work.

Contractor and DEQ mutually agree to delete the last sentence in the Schedule section of Task Order No. 44 and replace it with the following:

"All tasks will be completed by June 1, 2011."

IN WITNESS WHEREOF, Contractor and DEQ have executed this Modification A of Task Order No. 44 on the dates set out below.

STATE OF MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

02/08/11
Date

BY: Vicki J. Woodrow
VICKI J. WOODROW
Contracts Officer
Financial Services
Metcalf Building
1520 E. Sixth Avenue, PO Box 200901
Helena, MT 59620-0901

Approved for legal content by:

William B. Kirley
DEQ Counsel

2-4-11
Date

PIONEER TECHNICAL SERVICES, INC.

2/11/11
Date

BY:
DAVID S. TUESDAY
Vice President
63 ½ West Broadway
P.O. Box 3445
Butte, MT 59701

FEDERAL ID NO. 81-0474175

DEQ ORIGINAL

DEQ Contract No. 407038-TO44B

MODIFICATION B TO TASK ORDER NO. 44

This Task Order is issued pursuant to DEQ Contract No. 407038 between Pioneer Technical Services, Inc. (Contractor) and the Montana Department of Environmental Quality (DEQ). The purpose of this Task Order is to complete Draft Remedial Design (RD) for the Remedial Actions (RAs) in Reaches M, N and O of Subarea 3 of the Streamside Tailings Operable Unit (SST OU), as well as to complete design of the upgrade of the existing haul road through Reach L. This Modification B extends the period of performance to allow additional time needed to complete the remaining work.

Contractor and DEQ mutually agree to delete the last sentence in the Schedule section of Task Order No. 44 and replace it with the following:

"All tasks will be completed by June 1, 2012."

IN WITNESS WHEREOF, Contractor and DEQ have executed this Modification B of Task Order No. 44 on the dates set out below.

STATE OF MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

05/12/11
Date

BY: Vicki J. Woodrow
VICKI J. WOODROW
Contracts Officer
Financial Services
Metcalf Building
1520 E. Sixth Avenue, PO Box 200901
Helena, MT 59620-0901

Approved for legal content by:

C. Bradley Smith
C. Bradley Smith
DEQ Counsel

5/12/11
Date

PIONEER TECHNICAL SERVICES, INC.

5/23/11
Date

BY: David S. Tuesday
DAVID S. TUESDAY
Vice President
63 ½ West Broadway
P.O. Box 3445
Butte, MT 59701

FEDERAL ID NO. 81-0474175

RECEIVED
MAY 24 2011
Department of
Environmental Quality
Remediation Division

MODIFICATION C TO TASK ORDER NO. 44

This Task Order is issued pursuant to DEQ Contract No. 407038 between Pioneer Technical Services, Inc. (Contractor) and the Montana Department of Environmental Quality (DEQ). The purpose of this Task Order is to complete Draft Remedial Design (RD) for the Remedial Actions (RAs) in Reaches M, N and O of Subarea 3 of the Streamside Tailings Operable Unit (SST OU), as well as to complete design of the upgrade of the existing haul road through Reach L.

This Modification C adds tasks identified in the attached Scope of Work ("SOW"). Contractor shall implement this SOW. Contractor shall finalize the conceptual design for a Fish Barrier on Silver Bow Creek (that Contractor developed with the Montana Department of Fish, Wildlife and Parks)("FWP"), and incorporate that design into the bid package for remedial construction in Reaches M, N and O of Subarea 3 of the Streamside Tailings Operable Unit (SST OU). The Fish Barrier will be constructed as part of DEQ's next remedial construction contract. Modification C extends the period of performance to allow additional time to complete the additional work.

Contractor and DEQ agree that Contractor will track separately and provide DEQ (and FWP) with supporting documentation for all costs associated with the finalizing the design of the Fish Barrier, incorporating that design into the bid package and for constructing that Fish Barrier on Silver Bow Creek as part of DEQ's next remedial construction contract in Subarea 3 of the SSTOU. DEQ will pay Contractor (and FWP will reimburse DEQ) for the costs related this work up to a total cost ceiling of $32,700. The total cost ceiling for this work may not be exceeded without written authorization signed by DEQ, Contractor and FWP.

Contractor and DEQ mutually agree to delete the last sentence in the SCHEDULE section of Task Order No. 44 and replace it with the following:

"All tasks will be completed by December 31, 2012."

IN WITNESS WHEREOF, Contractor and DEQ have executed this Modification C of Task Order No. 44 on the dates set out below.

STATE OF MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

02/22/12
Date

BY: Vicki J. Woodrow
VICKI J. WOODROW
Contracts Officer
Financial Services
Metcalf Building
1520 E. Sixth Avenue, PO Box 200901
Helena, MT 59620-0901

Approved for legal content by:

C. Bradley Smith
DEQ Counsel

3/20/12
Date

PIONEER TECHNICAL SERVICES, INC.

Date

BY: _____
DAVID S. TUESDAY
Vice President
63 ½ West Broadway
P.O. Box 3445
Butte, MT 59701

FEDERAL ID NO. 81-0474175

Approved for legal content by:

C. Bradley Smith
DEQ Counsel

3/28/12
Date

PIONEER TECHNICAL SERVICES, INC.

3/28/12
Date

BY:

DAVID S. TUESDAY
Vice President
63 ½ West Broadway
P.O. Box 3445
Butte, MT 59701

FEDERAL ID NO. 81-0474175

RECEIVED BY DEQ
FINANCIAL SERVICES
2012 MAR 30 A 9:19

DEQ COST OR PRICE SUMMARY

Form Approved: 7-22-92

PART I - GENERAL

1. PROJECT **Reaches M-O Remedial Design, SST OU Subarea 3 - Modification C - Fish Barrier**	2. DEQ CONTRACT NUMBER: **407038-TO44C**
3. NAME OF CONTRACTOR OR SUBCONTRACTOR **PIONEER TECHNICAL SERVICES, INC.**	4. PROPOSAL DATE: **3/13/2012**
5. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR (Include ZIP Code) **Pioneer Technical Services, Inc.** **P.O. Box 3445** **Butte, Montana 59702** TELEPHONE NUMBER (Include Area Code) **(406) 782-5177**	6. TYPE OF SERVICE TO BE FURNISHED **Reaches M-O Remedial Design, SST OU Subarea 3 - Modification C - Fish Barrier**

PART II - COST SUMMARY

7. DIRECT LABOR (Specify labor categories)	ESTIMATED HOURS	HOURLY RATE	ESTIMATED COST	TOTALS
Tim Ranf	10	$44.75	$447.50	
Pierre Lemieux	20	$35.15	$703.00	
Dave Peitz	30	$25.70	$771.00	
George Austiguy	80	$40.00	$3,200.00	
Colette LeMieux	40	$34.50	$1,380.00	
Tony Wesche	10	$28.24	$282.40	
Todd Lorenzen	30	$36.95	$1,108.50	
Colt Wise	48	$37.21	$1,786.08	
Tyler Fortune	30	$18.32	$549.60	
Cedar Richards	22	$20.75	$456.50	
Kelli Maxwell	16	$14.33	$229.28	
DIRECT LABOR TOTAL:	336			$10,913.86
8. INDIRECT COSTS (Specify indirect cost pools)		x BASE =	ESTIMATED COST	
Salary	61.00%	10,913.86	$6,657.45	
General (G&A)	76.70%	10,913.86	$8,370.93	
INDIRECT COSTS TOTAL:				$15,028.38
9. OTHER DIRECT COSTS				
a. TRAVEL	UNITS	COST PER UNIT	ESTIMATED COST	
(1) Transportation 4x4 Pickup	283	$0.555	$157.07	
(2) Meals	0	$23.00	$0.00	
(3) Lodging (at cost)	0	$75.00	$0.00	
TRAVEL SUBTOTAL:			$157.07	
b. EQUIPMENT, MATERIALS, SUPPLIES (Specify categories)	UNITS	COST PER UNIT	ESTIMATED COST	
Field Supplies	1	$200.00	$200.00	
EQUIPMENT, MATERIALS, SUPPLIES SUBTOTAL:			$200.00	
c. SUBCONTRACTS (Specify Categories)	UNITS	COST PER UNIT	ESTIMATED COST	
Excavator	16	$125.00	$2,000.00	
SUBCONTRACT SUBTOTAL:			$2,000.00	
d. OTHER (Specify Categories)	UNITS	COST PER UNIT	ESTIMATED COST	
Geotechnical Laboratory Testing				
Moisture Content	4	$15.00	$60.00	
Soil Gradation	4	$110.00	$440.00	
Hydrometer	4	$85.00	$340.00	
Atterberg Limits	4	$90.00	$360.00	
Proctor	4	$150.00	$600.00	
OTHER SUBTOTAL			$1,800.00	
OTHER DIRECT COSTS TOTAL:				$4,157.07
10. TOTAL ESTIMATED COST				$30,099.31
11. PROFIT				$2,595.07
12. TOTAL PRICE				$32,694.38

Profit/Fee Objective	1. Contractor	2. RFP or Contract No.
	Pioneer Technical Services, Inc.	**407038-TO44C**

CONTRACTOR INPUT TO TOTAL PERFORMANCE

Cost Category		Government's Co Objective (a)	Weight Range (b)	Assigned Weight-L (c)	Weighted Profit/Fee ((a)x(c)) (d)	Assigned Weight-Hi (e)	Weighted Profit/Fee ((a)x(e)) (f)	Assigned Weight-Av (g)	Weighted Profit/Fee ((a)x(g)) (h)
Direct Materials:	Purchases	$0.00	1%-4%	1%	$0.00	4%	$0.00	2.50%	$0.00
	Subcontracts	$0.00	1%-5%	1%	$0.00	5%	$0.00	3.00%	$0.00
Equipment		$0.00	1%-2%	1%	$0.00	2%	$0.00	1.50%	$0.00
Engineering:	Direct Labor	**$10,913.86**	8%-15%	8%	$873.11	15%	$1,637.08	12.00%	**$1,309.66**
	Overhead	**$15,028.38**	6%-9%	6%	$901.70	9%	$1,352.55	8.00%	**$1,202.27**
Manufacturing:	Direct Labor	$0.00	5%-9%	5%	$0.00	9%	$0.00	7.00%	$0.00
	Overhead	$0.00	4%-7%	4%	$0.00	7%	$0.00	5.50%	$0.00
Consultants		$0.00	2%-5%	2%	$0.00	5%	$0.00	3.50%	$0.00
Other Direct costs:		**$4,157.07**	1%-3%	1%	$41.57	3%	$124.71	2.00%	**$83.14**
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
		$0.00	1%-3%	1%	$0.00	3%	$0.00	2.00%	$0.00
General & Administrative		$0.00	5%-8%	5%	$0.00	8%	$0.00	6.00%	$0.00
TOTALS		$30,099.31			$1,816.38		$3,114.35		**$2,595.07**
AVERAGE PROFIT					6.03%		10.35%		8.62%

PIONEER
TECHNICAL SERVICES, INC.

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January 25, 2012

Mr. Pat Saffel – Fisheries Manager
Montana Fish, Wildlife and Parks
Region 2
3201 Spurgin Road
Missoula, MT 59804

Mr. Jason Lindstrom - Fisheries Biologist
Montana Fish, Wildlife & Parks
P.O. Box 881
Deer Lodge, MT 59722

RE: Silver Bow Creek Fish Barrier

Sent via email

Dear Pat and Jason:

Per our discussions on January 3, 2012, Pioneer Technical Services (PTS) has prepared a proposed scope and budget to design a fish barrier on Silver Bow Creek (SBC). The proposed fish barrier will be located in Reach N of Subarea 3A (SA-3A), within the Stream Side Tailings Operable Unit (SSTOU), downstream of German Gulch near Fairmont Hot Springs, MT.

It is our understanding that the SBC fish barrier design is proposed to be included in the SSTOU SA-3A Final Design Package and that a Memorandum of Understanding (MOU) between the stakeholder agencies will be executed to facilitate incorporation of this proposed scope of work and budget under the existing SSTOU SA-3A design contract. This proposed scope of work and budget does not include construction phase support. It is anticipated that construction phase support will be addressed under a subsequent contract at a later date.

Design Criteria

We understand the fish barrier is to be designed to eliminate salmonids from passing the barrier structure during flows up to the 50-year flow event. The structure will be designed to be structurally stable during the 100-year flow event. In addition to the fish passage and structural criteria, we understand that per the SSTOU Record of Decision (ROD), the structure must transport sediment.

Scope of Work

The following proposed scope of work is based on the understanding that fish barrier engineering analysis and design will make use of the existing SSTOU survey data, the SSTOU project hydrology, the project HEC-RAS models and the sediment transport models developed for SSTOU SA-3A.

The proposed scope of work is organized into five tasks. The proposed tasks are:

Task 1 – Hydraulic Analysis: The objective of this task is to evaluate three different potential locations to site the proposed fish barrier, develop a preferred location on which to base the final design and conduct the final design hydraulics. The proposed site locations to be modeled include:

- Site 2A;
- Site 2B; and
- A location downstream of Site 2B and upstream of the pedestrian bridge.

These site locations are based on a previous fish barrier feasibility evaluation (*Pioneer Technical Services, Silver Bow Creek Fish Barrier Evaluation, 11/26/11).* The attached Figure 1 provides a reference for these three locations.

Under this task the SSTOU SA-3A proposed conditions hydraulic model (HEC-RAS) will be modified to include a fish barrier. Three separate simulations representing the three different barrier locations identified above will be developed within Reach N of SSTOU SA-3A. Each potential site will be evaluated for the bankfull flow, the 50-year flow and the 100-year flow. Inundation mapping (Plan and Cross-sections) will be developed for each simulation. These results will be used to estimate the impacts to the local railroad infrastructure. The site with the least impact to the railroad infrastructure will be selected as the preferred alternative.

The barrier design concept, to be evaluated, is a cast in place, concrete weir type drop structure with a sloping downstream apron. The elevated apron eliminates submergence by channel tailwater and maintains a shallow, high velocity water surface downstream from the barrier weir. This design requires the fish to use its burst speed and leaping ability to access the apron, the shallow apron flow impedes the swimming and leaping ability of the fish. The structure shall have the following design criteria:

- The downstream crest of the apron will be elevated above the maximum design tailwater surface elevation;
- The minimum apron length will be 16 feet;
- The minimum apron slope shall be 16H:1V;
- The minimum weir height of the barrier will be 3.5 ft above the apron height; and
- The structure shall be designed to exclude fish passage up to the 50-year flow and to be structurally during the 100-year flow.

These design criteria are based on NOAA Fisheries design guidance.

The work product for this task will be a technical memorandum documenting the analysis. The technical memorandum will be submitted to MT FWP, DEQ and NRD for review, comment and approval of the selected barrier location prior to conducting further engineering analyses and design tasks.

Task 2 – Sediment Transport Analysis: The objective of this task is to estimate the changes in sediment transport resulting from the proposed fish barrier. Under this task the proposed condition SSTOU project sediment transport modeling and analysis will be modified to include the proposed fish barrier at the location selected in Task 1. The results of this analysis will be documented in a technical memorandum and submitted to DEQ for review and comment.

Task 3 – Geotechnical Investigation and Analysis: The objective of this task is to characterize the terrace subgrade materials within the barrier footprint and adjacent to the two-rail grades infrastructure. Specifically the following work will be conducted under this task:

- Develop a Project Geotechnical Sampling and Analysis Plan (SAP) to collect the data required to support the barrier design and estimate potential impacts to the rail grade infrastructure.
  - It is anticipated that the geotechnical investigation will consist of test pitting, collecting material samples and laboratory analysis. No drilling is proposed at this time.
- Conduct the geotechnical field work per the Project Geotechnical SAP.
- Conduct the laboratory testing per the Project Geotechnical SAP.
- Conduct the geotechnical calculations and analysis necessary to support the barrier design rail grade evaluation. The geotechnical analysis will include:
  - Bearing Capacity calculations.
  - Rail Grade Consolidation Analysis.

If weak subgrade materials are encountered adjacent to the rail grades, additional testing and analysis may be required to estimate impacts of the fish barrier on the stability of the rail grades. Should this occur, a scope and budget amendment will be submitted to cover this additional work.

Task 4 – Structural Analysis and Design: Based on the results of the hydraulic modeling and the geotechnical investigation, a structural analysis and design will be conducted for the cast in place concrete fish barrier structure. The structure will be designed to be structurally stable during the 100-year flood.

Task 5 - Develop Plans and Specifications: Construction drawings and technical specifications suitable for inclusion in the SSTOU SA-3A bid package will be developed. The construction drawings and specifications will bear the seal of a Montana Professional Engineer and include plan-profile sheets, details and cross-sections.

Budget

The work is proposed to be conducted on a time and materials basis, not to exceed without written authorization. Total cost of the work (rounded to the nearest $100) is estimated not to exceed $32,800. The attached Table 1 presents a summary of the estimated costs for the above scope of work.

Schedule

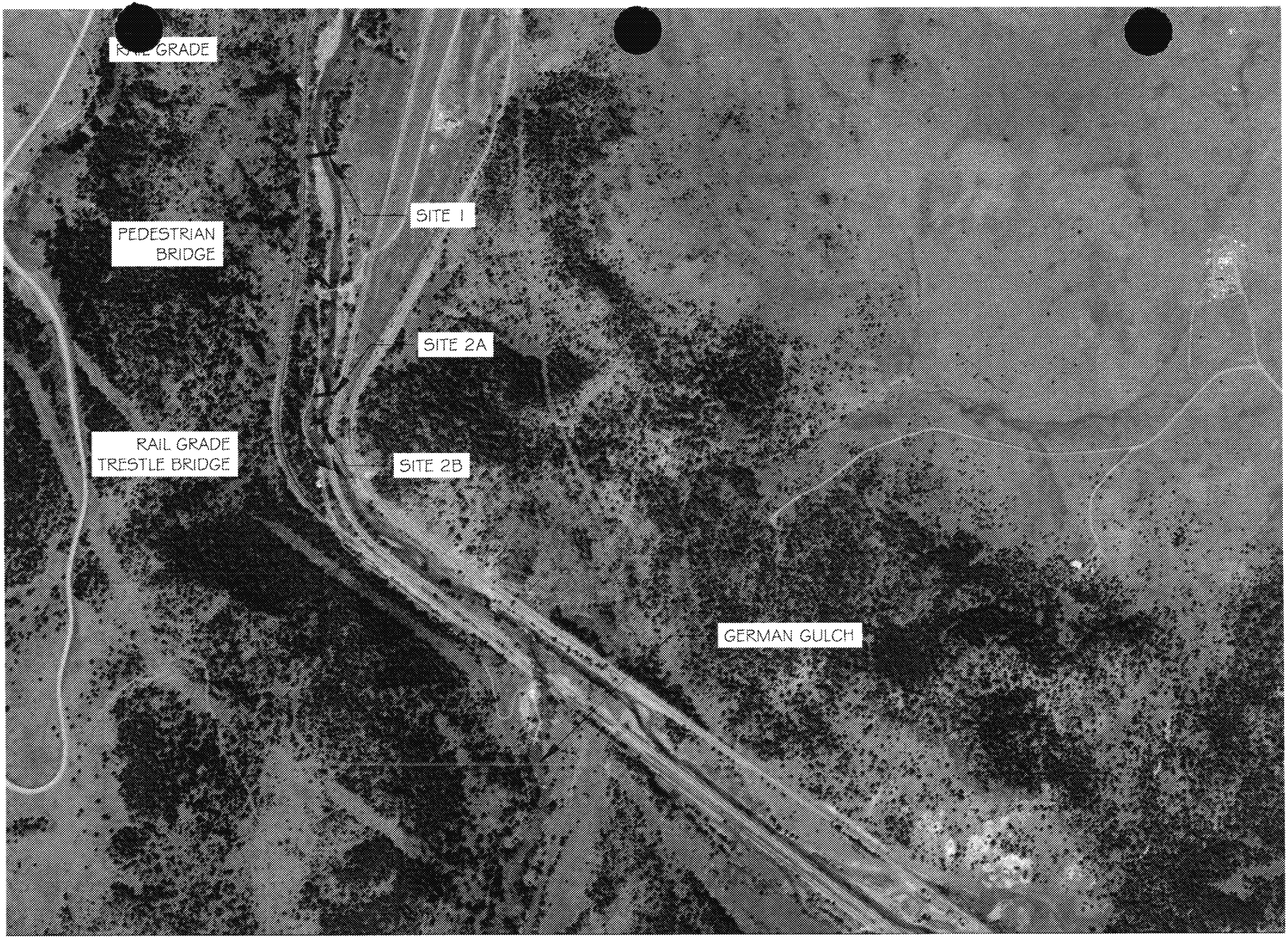
The proposed schedule is to complete Task 1 and Task 2 and develop the Geotechnical SAP this winter in order to conduct the field investigation as soon as site conditions permit. The hydraulic modeling (Task 1) will begin within 10 working days after receipt of notice to proceed. A draft final design will be completed by September 30, 2012.

As noted in the "Task 3 – Geotechnical Investigation and Analysis" discussion, if weak subgrade materials are encountered during the field investigation, additional testing and analysis outside of this proposed scope of work may be required. Should this occur, we will submit a request to amend the scope and budget to conduct this additional work.

We appreciate the opportunity to work with you on your native cutthroat restoration project. If you have any questions on the above proposed scope and budget estimate please don't hesitate to contact me.

Sincerely,

George Austiguy P.E.
Pioneer Technical Services, Inc.



A

DISPLAYED AS:

FIGURE 1

TABLE 1
MT FWP Silver Bow Creek Fish Barrier Analysis and Design
Civil Design Services Cost Estimate
Site: SBC near Fairmont Hot Springs, MT

Task	Cost Estimate
Task 1:Hydraulic Analysis	$ 6,028
Task 2: Sediment Transport Analysis	$ 5,452
Task 3: Geotechnical Investigation and Analysis	$ 10,841
Task 4: Structural Engineering	$ 5,524
Task 5: Develop Plans and Specifications	$ 4,956
Grand Total	$ 32,801

MODIFICATION D OF TASK ORDER NO. 44

Pioneer Technical Services, Inc. (Contractor) and the Montana Department of Environmental Quality (DEQ) mutually agree to modify Task Order No. 44, which was entered into pursuant to DEQ Contract No. 407038. The purpose of this Task Order is to complete Draft Remedial Design (RD) for the Remedial Actions (RAs) in Reaches M, N and O of Subarea 3 of the Streamside Tailings Operable Unit (SST OU). This Modification D provides for additional changes to the design of the stream channel as a result of flooding in 2010-2011 and experience in methods for stream diversion and dewatering. Modification D also provides additional time to complete these tasks.

Preliminary siting and analysis has been completed on the proposed fish barrier structure located in Reach O, as described in Modification C. Additional geotechnical investigations (including drilling), analysis and design are needed to complete final design and incorporate the structure details into the Reaches M-O bid package. Funding for this portion of the task order will be reimbursed to DEQ by the Natural Resources Damage Program (NRDP). Contractor and DEQ agree that Contractor will track separately and provide DEQ (and NRDP) with supporting documentation for all costs associated with the finalizing the design of the Fish Barrier, for incorporation into the bid package. DEQ will pay Contractor (and NRDP will reimburse DEQ) for the costs related this work.

Contractor and DEQ mutually agree to modify the **TASK DESCRIPTION** section of Task Order No. 44 by adding the following under **DESIGN TASKS**:

> **"Restoration Related Tasks – NRDP-funded**
>
> - Incorporate restoration design enhancements to the stream design and floodplain design. Build the restoration elements into the bid documents.
> - Finalize the design for the proposed Fish Barrier in Reach O. This work shall include a geotechnical investigation involving drilling and sampling, final hydraulic analysis, structural design, and development of plans and specifications."

Contractor and DEQ mutually agree to delete the entire **COMPENSATION** section of Task Order No. 44 and replace it with the following:

> "Compensation will be paid in accordance with DEQ Contract No. 407038. The original cost under this Task Order was $153,911.26, plus a fixed fee of $14,373.27, making a total cost of $168,284.53, as estimated on the DEQ Cost or Price Summary initially attached to Task Order No. 44.
>
> Modification A did not increase allowable costs.
>
> Modification B did not increase allowable costs.

Modification C authorized an increase of allowable costs up to $32,700 for the design of the Fish Barrier, the monies to be paid by DEQ and reimbursed up to that amount by FWP. The cost of this Task Order No. 44, including Modification C was $184,010.57 plus a fixed fee of $16,968.34 making a total cost of $200,978.91 ($32,694.38 being reimbursed by MT FWP).

This Modification D to Task Order No. 44 increases allowable costs by $87,173.88, plus a fixed fee of $8,120.79, which results in a total cost increase under Modification D of $95,294.67, as estimated on the attached DEQ Cost or Price Summary. (NRDP's portion of this increase will be $43,436.42, plus a fixed fee of $3,869.97; total amount to be reimbursed by NRDP of $47,306.39).

The total cost for Task Order No. 44 including Modifications A-D, shall not exceed $271,184.45 plus a fixed fee of $25,089.13 which results in a total cost ceiling for Task Order No. 44 of $296,273.58. Compensation will be paid to Contractor according to invoices submitted monthly for costs actually incurred. The total cost ceiling may not be exceeded without written authorization signed by DEQ and Contractor."

Contractor and DEQ mutually agree to delete the last sentence in the SCHEDULE section of Task Order No. 44 and replace it with the following:

"All work under this Task Order shall be completed by June 30, 2013."

IN WITNESS WHEREOF, Contractor and DEQ have executed this Modification D of Task Order No. 44 on the dates set out below:

STATE OF MONTANA DEPARTMENT
OF ENVIRONMENTAL QUALITY

12/20/12
DATE

BY: Vicki J. Woodrow
VICKI J. WOODROW
Contracts Officer
Financial Services
Metcalf Building
1520 E. Sixth Avenue, P.O. Box 200901
Helena, MT 59620-0901

Approved for legal content by:

C. Bradley Smith
C. Bradley Smith
DEQ Legal Counsel

12/19/12
DATE

PIONEER TECHNICAL SERVICES, INC.

12/28/12
DATE

BY: _____
DAVID S. TUESDAY
Vice President
63 ½ West Broadway
P.O. Box 3445
Butte, MT 59701

FEDERAL ID NO. 81-0474175

DEQ COST OR PRICE SUMMARY

Form Approved: 7-22-92

PART I - GENERAL

1. PROJECT **SST OU SA3 Reaches M-O, Mod D**	2. DEQ CONTRACT NUMBER: **407038-TO44**
3. NAME OF CONTRACTOR OR SUBCONTRACTOR *PIONEER TECHNICAL SERVICES, INC.*	4. PROPOSAL DATE: **11/8/2012**
5. ADDRESS OF CONTRACTOR OR SUBCONTRACTOR (Include ZIP Code) **Pioneer Technical Services, Inc.** **P.O. Box 3445** **Butte, Montana 59702**	6. TYPE OF SERVICE TO BE FURNISHED **SST OU SA3 Reaches M-O, Mod D**
TELEPHONE NUMBER (Include Area Code) **(406) 782-5177**	

PART II - COST SUMMARY

7. DIRECT LABOR (Specify labor categories)	ESTIMATED HOURS	HOURLY RATE	ESTIMATED COST	TOTALS
Tim Ranf	146	$47.00	$6,862.00	
Pierre LeMieux	134	$37.00	$4,958.00	
Colt Wise	52	$38.40	$1,996.80	
Pat Redmond	38	$41.57	$1,579.66	
Dave Peitz	156	$26.90	$4,196.40	
George Austiguy	36	$40.76	$1,467.36	
Colette LeMieux	160	$35.40	$5,664.00	
Nate Hagen	142	$29.50	$4,189.00	
Cedar Richards	84	$21.51	$1,806.84	
Erin Olson	166	$15.70	$2,606.20	
Kelli Maxwell	12	$14.85	$178.20	
DIRECT LABOR TOTAL:	1,126			$35,504.46

8. INDIRECT COSTS (Specify indirect cost pools)		x BASE =	ESTIMATED COST	
Salary	57.10%	35,504.46	$20,273.05	
General (G&A)	75.60%	35,504.46	$26,841.37	
INDIRECT COSTS TOTAL:				$47,114.42

9. OTHER DIRECT COSTS				
a. TRAVEL	UNITS	COST PER UNIT	ESTIMATED COST	
(1) Transportation 4x4 Pickup	1,000	$0.555	$555.00	
(2) Meals		$23.00	$0.00	
(3) Lodging		$36.40	$0.00	
TRAVEL SUBTOTAL:			$555.00	
b. EQUIPMENT, MATERIALS, SUPPLIES (Specify categories)	UNITS	COST PER UNIT	ESTIMATED COST	
			$0.00	
EQUIPMENT, MATERIALS, SUPPLIES SUBTOTAL:				
c. SUBCONTRACTS (Specify Categories)	UNITS	COST PER UNIT	ESTIMATED COST	
Driller	1	$3,000.00	$3,000.00	
Driller Mob/DeMob	1	$1,000.00	$1,000.00	
SUBCONTRACT SUBTOTAL:			$4,000.00	
d. OTHER (Specify Categories)	UNITS	COST PER UNIT	ESTIMATED COST	
			$0.00	
			$0.00	
			$0.00	
OTHER SUBTOTAL			$0.00	
OTHER DIRECT COSTS TOTAL:				$4,555.00

10. TOTAL ESTIMATED COST	$87,173.88
11. PROFIT	$8,120.79
12. TOTAL PRICE	$95,294.67

PROFIT/FEE CALCULATION	Cost	Weight	Weighted Fee	Totals
Engineering - Direct	$35,504.46	12%	$4,260.54	$39,765.00
Engineering Overhead	$47,114.42	8%	$3,769.15	$50,883.57
Other Direct	$4,555.00	2%	$91.10	$4,646.10
TOTALS & WEIGHTED AVERAGE PROFIT	$87,173.88	9.32%	$8,120.79	$95,294.67